Ash-Composites are Safe

The table below compares EPA M1313 leach tests conducted on fly ash alone (1-day leaching) and an Ash-Composite block in a continuously circulating water tank for 1-, 6-, and 14-month leaching tests. Leachate samples were collected and analyzed using ICP and ICPMS instruments. All the data are expressed in microgram/liter (ppb). Fly ash alone leached Sb, As and Se minerals and exceeded the EPA MCL; whereas the Ash-Composite block leached less than one-third the MCL after 14 months of immersion in circulating tank filled with distilled water.

Minerals	EPA MCL	EPA M1313 test. Fly ash	Ash-Composite Blocks, Circulating Tank (source 1)		
		Source 1	1-Month	6-Month	14-Month
Sb by ICPMS	6	37	10 U	10 U	10 U
As by ICPMS	10	160	2 U	2 U	3.7
B by ICP	7000*	3,800	460	900	1200
Ba by ICP	2,000	180	10 U	10 U	10 U
Be by ICP	4	5 U	5 U	5 U	5 U
Cd by ICPMS	5	1.3	0.5 U	0.5 U	0.5 U
Cr by ICPMS	100	49	5 U	5 U	5 U
Cu by ICPMS	1,300	2 U	9.2	2.4	4.3
Hg 245.1	2	0.2 U	0.2 U	0.2 U	NA
Mn by ICPMS	50	10 U	10 U	10 U	16
Mo by ICPMS	200*	300	NA	29	67
Pb by ICPMS	15	2 U	2.3	2 U	2 U
Se by ICPMS	50	510	1.0	3.5	6.9
Tl by ICPMS	2	2 U	2 U	2 U	2 U
V by ICP	200	150	10 U	10 U	21
Zn by ICPMS	5,000	10 U	690	570	130

Leachates	from	fly ach	and fly	ash_com	nosite h	locks 11 g/I	
Leachates	nom	пу азп	anu ny	asii-com	posite n	10CK5, µg/L	1

1. All tests were conducted in distilled water

2. U - Instrument limit

* DWEL - Drinking water limit